













USEPA Asset Management Workshop

The Fundamentals of Asset Management A Hands-On Approach



September 9-10, 2009

Training Center:

Kankakee Community College 100 College Drive Kankakee, IL 60901



Sponsored by:

USEPA

Region V.
Office of Wastewater Management.

Illinois

Water Environment Association (IWEA)

Rural Water Association (IRWA)

Water Works Association (IWWA)

Environmental Protection Agency (IEPA)

Association of Wastewater Agencies (IAWA)

Association of Water Pollution Control Operators (IAWPCO)

Kankakee Community College

Registration Deadline: September 1, 2009 (Register Early – Space is Limited)

<u>The Challenge:</u> Over the past half century, America has spent trillions of dollars building some of the finest infrastructure that history has ever seen. This investment has played a substantial role in the sustained prosperity and quality of life of our country. But in many communities, this infrastructure is severely stressed from overuse, under funding of maintenance and renewal, and aging.

A comprehensive approach to managing our capital assets is overdue – one that brings "state of the practice" advanced asset management (AM) concepts, tools, techniques, and technologies to bear on managing for cost-effective performance. This approach focuses relentlessly on providing sustained performance to the customer at the lowest life-cycle cost and at an acceptable level of risk to the organization.

<u>The Focus:</u> Public sector managers have been managing assets for decades. However, it is clear that what we have been doing in the past will not be sufficient to address the growing and increasingly complex challenges that lie ahead. Practical, advanced techniques for better management of assets have been developed and refined in both the private sector in the US and in water and wastewater agencies around the world. Management thinking is centered on long-term effectiveness, service sustainability, and effective environmental management. How can these advanced asset management concepts, tools and techniques be most effectively transferred into the water and wastewater industry, more specifically, into your agency? Where to start? How to proceed? How to select appropriate tools?

<u>The Workshops</u>: The AM challenge for US agency officials is one of "knowledge transfer." **For that reason, these workshops** have been designed as an extensive hands-on experience. Each workshop:

- ♦ Incorporates a real-world storyline to realistically demonstrate an advanced asset management way of approaching difficult asset-driven problems.
- ♦ Is built around **participant exercises** that demonstrate the concepts, techniques and tools of advanced asset management.
- ♦ Is centered on **case-based mentoring** by expert asset management practitioners.

The agenda is built around five core AM questions. The workshops focus on demonstrating, step-by-step, how an agency would select and deploy "Best Appropriate AM Practices" that are best suited to that agency.















Agenda Highlights Day Two

Day One

7:30 a.m. - 8:00 a.m. Continental Breakfast and Name Badge Pick-up

8:00 a.m. - 4:30 p.m. Duration of Workshop Introductions

Background and Context

- The Changing Utility Industry
- The Emerging Utility Of Tomorrow

Introduction of Storyline, Overview of Fundamental Concepts and Core Practices

- Introduction Of Storyline
- A Definition Of AM
- A "Meta View" of the AM Paradigm
- Managing The Asset Base's "Potential To Fail"
- Payoffs And Benefits, Downsides
- The "Five Core Questions" and the "10-Step AM Process"

Storyline and Worksheets - Tom's Bad Day Core Question 1: What Is The Current State Of My Assets?

- What is an Asset?
- Building a "Process Layout" Schematic
- Creating The "Asset Hierarchy"
- Defining The "Data Standard"
- Initial Condition Analysis, Remaining Physical Life
- The Four Major Failure Modes
- Determining Replacement Value
- Financial Accounting versus Managerial Accounting

Core Question 2: What Is My Required "Sustainable" Level Of Service (LOS)?

- What Is "LOS"? Why Do It?
- How It Works (Strategic Level Versus Operations Level)

Core Question 3: Which Assets Are Critical To Sustained Performance?

- Understanding How My Assets Can Fail the Four Major Failure Modes
- Determining The "Likelihood Of Failure"
- Determining The "Consequences of Failure"
- How to Measure Our Agency's "Business Risk Exposure"?

Discussion, Q & A and Feedback

7:30 a.m.-8:00 a.m. Continental Breakfast 8:00 a.m.-3:45 p.m. Duration of Workshop Summary of Day 1, Outline Of Day 2

Core Question 4: What Are My Best Minimum Life-Cycle-Cost CIP And O&M Strategies?

- What Alternative "Treatment" (Management) Options Are Feasible?
- Which Is The Best Option? The Basics of "Optimized Renewal Decision Making"

Core Question 4: O&M (Continued)

- Using AM To Drive Operations And Maintenance
- Moving Systematically Into Reliability Centered And Condition-Based Maintenance

Core Question 4: CIP (Continued)

- Using AAM To Drive CIP
- Strategic CIP Validation

Core Question 5: What Is My Best Long-Term Funding Strategy?

- So, Valuation Really Does Matter?
- Determining A Sustainable Renewal Funding Level
- Effectively Telling The Funding Story
- The "Whole Of Business" Perspective Using AAM For Rate Setting & Budgeting
- Building Your First Asset Management Plan ("AMP")

Focus Topic 1: Deploying an AAM Program (As time permits)

- The Four Fundamental Deployment Strategies
- "Gap Analysis" Benchmarking & Developing The AAM Improvement Program
- The Human Side
- The Political Side
- Implementation Work Plans Lessons Learned

Closing Summary, Questions, Comments

About Our Trainers:

Mr. Steve Allbee – USEPA Project Director, Gap Analysis; primary author, USEPA's The Clean Water and Drinking Water Infrastructure Gap Analysis; 25 years EPA – development of financing programs; BA, MA, MPA.

Mr. Duncan Rose, --Technical Director and Principal Consultant, GHD; former city/county manager; co-author of WEF's textbook, Managing the Water and Wastewater Utility; 30 years state & local government management; Adjunct Faculty, Florida State University, Askew School of Public Policy; BA, MSP, MAPA

Over Night Hotel Accommodations

A limited number of rooms are available at the Hilton Garden Inn, with a rate of \$70.00 per night plus tax. Reservations must be made two weeks in advance by calling 815-932-4444 and asking for the Asset Management Room Block. For additional rooms contact KCC at (815) 802 8207.

More information about the workshop and asset management is available at www.epa.gov/owm/assetmanage/assets_training.htm

Registration Questions? Contact - Mary Posing at (815) 802-8202 or mposing@kcc.edu

Registration fee for workshop is \$225.00 after September 1, 2009 it will be \$250. No refunds if registration is cancelled after September 1, 2009, which includes workshop, workshop materials continental breakfast and lunch daily. Seats are limited, so please register early.















Registration Form

Register by calling (815) 802-8207. Visa, MasterCard, and Discover Card are accepted for registration. Pre-registration is required, no on-site registration is available.

Name	Badge Name	Birth date
Organization	Title	
Mailing Address		
City, State, Zip Code		
Daytime Phone	Ema	il
Registration Fee	\$ 225.00 before September 1, 2009 – After September 1, 2009 \$250.00	

Please mail registration with a check made out to KCC:

Kankakee Community College Continuing Education 100 College Drive Kankakee, IL 60901

Questions: Contact Mary Posing At (815) 802 8202 or mposing@kcc.edu. To register over the phone call Grace @ (815) 802 8207.